

Proposed Action
Alabama Hills Defensible Space Fuels Reduction Project
Inyo National Forest, Mount Whitney Ranger District

April 2018

Background and Purpose and Need

The ecosystems of the Eastern Sierra are adapted to fire and there is an active fire regime. The area is historically prone to experiencing large, fast moving wildfires under certain conditions. Many of the largest fires have occurred when downslope winds have driven natural and human-caused wildfires to move rapidly across the foothills of the Owens Valley. Historically, these fires have often followed the paths of creeks and adjacent riparian vegetation, as these areas offer the heaviest concentrations of fuels (ex. Center Fire in 2010 in Big Pine, California). When such events occur, firefighters typically have been unsuccessful in controlling the fires until the wind event subsides and/or the fire moves into lighter fuels.

The Alabama Hills area near Lone Pine, CA is highly susceptible to downslope wind events, and therefore there is a high likelihood of a fast moving wildfire impacting the area. The developments in the project area are within the Wildland-Urban interface (WUI) where they are embedded in wildland vegetation. According to California state law, Public Resources Code (PRC) 4291, property owners in the WUI must maintain a minimum of 100 feet of defensible space from any structure on their property. Forest Service Region 5 direction states that, “where consistent with existing Forest Land and Resource Management Plan Direction, Forest Supervisors will provide for a one-hundred foot (100’) defensible space minimum (ref. Section 4291) for all structures on administrative sties, structures authorized by permit, and for developments adjacent to NFS lands” (Forest Service Manual Pacific Southwest Region Supplement No. 5100-2010-1). Within the proposed project boundary, there are small communities and structures that are highly at risk as they lie in or adjacent to heavy concentrations of fuels. The proposed fuel reduction project would take place on Forest Service administered lands lying adjacent to at risk structures.

The primary purpose of this project is to provide defensible space to help protect structures and developments and provide safety for visitors and residents in the Granite View subdivision and Carrol Creek in the event of a wildfire. Improving and protecting the ecological health of the vegetation and wildlife in the project area is also an objective of the project. The project should also allow managers more flexibility to meet resource objectives by managing wildfire away from the developed recreation areas and communities once they have been buffered by a zone of sparser fuels. This will help meet objectives for improving wildlife and vegetation condition using natural wildfire, which is difficult without defensible space around structures. Creating defensible space and fuelbreaks are not intended to stop a fire, but to help reduce the fire intensity and provide a safer location for fire suppression forces to defend structures and control a fire if needed.

Alabama Hills Defensible Space Project Proposal

4/18/2018

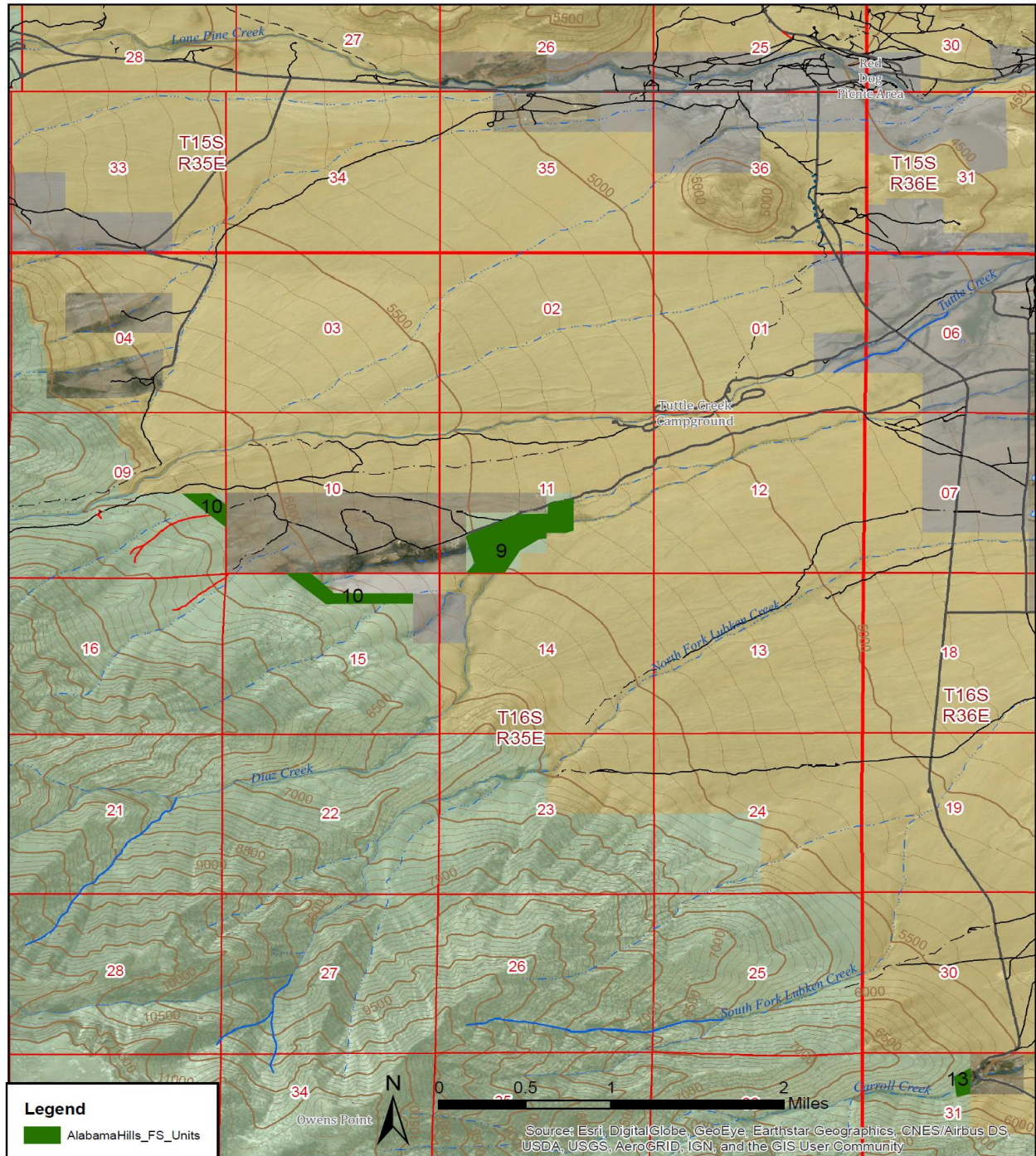


Figure 1. Overview of the proposed project area

Proposed Action Summary

The proposal would create defensible space on Forest Service land around structures in Granite View and Carroll Creek. A minimum of 100 feet of defensible space would be created around structures, but may be greater where topography and vegetation require it. Figure 1 shows the project area where treatments would be allowed. Within that area, an initial fuel break design is shown which may be modified if needed to adequately protect the structures within the project boundary. The initial fuel break design will affect approximately 125 acres of Forest Service lands.

Around private lands, none of the defensible space fuel reduction on public lands will be as important to protecting structures as the corresponding defensible space maintained by the private land owners. A partnership between the Forest Service, Bureau of Land Management (BLM), and the private land owners is the best way to provide good defensible space in this situation. Treatment on adjacent BLM lands (see fig. 1) is also being proposed, and may be implemented at a later date.

Defensible space treatments on public lands will be maintained as necessary on a frequency determined by the rate of vegetation regrowth. Typical frequencies of maintenance range from 2-5 years in productive upland sites.

Methods for achieving fuel reduction are described below. Appendix A contains design features which will be used to minimize effects to cultural and natural resources.

Method Descriptions

Methods used will depend on vegetation types, terrain and the overall setting, including distance to homes or other development. The different methods that will be used are described here.

Mowing shrubs

The use of a Bobcat™, ASV™ (a compact track loader), or similar-sized machine with low ground pressure (less than 10 psi) equipped with a mower or other appropriate attachment to mow and mulch shrubs and small trees. Chips remain on the ground. The height of mowing can be controlled to leave a percentage of existing shrub cover. Mosaic patterns, islands of untreated vegetation, unit boundaries that follow natural features, and irregular wavy edges will be used wherever possible to minimize effects to visual quality.

Hand cutting shrubs

The use of chainsaws or hand tools to hand-cut shrubs, usually in a mosaic pattern so that small patches or a percentage of the vegetation are left uncut. Some of the preferred shrub species such as bitterbrush will be left to create natural islands within the treatment. The resulting slash would

be piled and burned or chipped depending on the access, recreation setting, and resource concerns (See “piling and burning” and “chipping” method descriptions and descriptions of the actions in each site below).

Thinning trees

Very few tree species occur within the project area. If necessary, chainsaws would be used to remove or thin trees from woodlands (pinyon) and riparian (willow). A written prescription will guide treatment implementation and selection of trees to be cut (see description of treatments by vegetation type for size classes and/or spacing).

Any remaining slash (tree limbs and boles) will be treated by piling and burning, or chipping depending on access and resource concerns (See “piling and burning” and “chipping method” descriptions below), or could be removed off site for disposal.

Limbing

Limited limbing will occur in the project area. If necessary, some riparian trees may be limbed using chainsaws or hand tools. This will eliminate ladders for fire into tree canopy. Slash will be treated in the same manner as the rest of the slash from the unit.

Removal of dead and down vegetation

In riparian areas (vegetation associated with streams or wetlands), dead and down vegetation will be cut with chainsaws or hand tools. It will be removed from the riparian area by hand and piled outside the riparian area for burning, or be hauled away.

Personal-Use Fuelwood Collection

Not enough trees would be cut to provide fuelwood.

Piling and burning

Slash may be piled by hand and burned under favorable conditions once the slash has cured. The locations of piles will be carefully selected. Where possible, piles will be constructed in natural openings, on top of cut stumps where trees have been removed, and outside areas with high annual grass density. Piles will be constructed at least 10 feet from any remaining tree. A prescribed burn plan written by a qualified burn boss will be followed. Piling will be done where piles can be safely burned according to a qualified burn boss and will be used especially where there is poor access for chippers or hauling away slash.

Chipping

Slash will be chipped with a mechanical chipper. The chips will either be blown back onto the site at a depth no greater than 2 inches or hauled off the site. Chippers will not be used off existing routes.

Chipping will be used to treat slash in areas where piling and burning cannot be done safely according to a qualified burn boss and where there is adequate road access for the chipper.

Seeding native species

A native fire-resistant species mix of low growing perennials such as blue grass (*Poa secunda*) appropriate for the site would be used where competition from natives is necessary to limit annual grass abundance. Seeds will be certified “weed free” and collected locally where possible. Seeding will be done by any accepted method including hand or rangeland drill. To monitor the success of the seeding and competition with annual grasses, this method would be implemented with control and treatment sites and monitored for at least 5 years after treatment. If seeding is successful in reducing cheatgrass it would be implemented in all parts of the treatment areas where there is a need to reduce cheatgrass through competition.

Treatments by vegetation type

Treatments will depend on vegetation type. Below the vegetation types, treatments, and methods to be used are described in the order of their abundance within the project area.

Upland shrubs: The majority of the project area is dominated by upland shrubs. The species vary by elevation from black brush at the lowest elevations to mountain big sagebrush and bitterbrush at the higher elevations. Treatments would include shrub removal by mowing with low ground pressure mowers or hand cutting with chainsaws or hand tools, as described above. In lower elevation areas where cheatgrass is abundant, seeding with native herbaceous species would be used to compete with cheatgrass as described in the method section above.

Riparian: Treatments would be removing dead and down vegetation from the riparian area. Some understory shrubs would be cut in open stands (see hand cutting shrubs method description). Because riparian vegetation regrows so quickly and it is important for shading waterways and for wildlife habitat, thinning or cutting live riparian overstory vegetation would be extremely limited. Some young conifers trees may be cut (see hand thinning trees method description) to improve the ecological condition of the riparian stand,

All resulting slash would be removed from the riparian zone and treated with either of the slash treatment methods (piling and burning or chipping) or be hauled away.

Site Specific Treatment Descriptions (refer to Fig. 1 map for description)

9. Granite View RX (FS Admin) - ~100 acres

25 ft. wide fuel breaks would be created along north-south running fence lines within the pasture. These would act to protect the existing wooden fence posts and/or as control lines for up to three prescribed fire units which could be burned in rotation. Perimeter control lines may be utilized on the West, South and East sides of the unit. (Granite View access road would be the northern control line.) If determined necessary, control lines would be less than 25 ft. wide and placed in sparse upland vegetation. Low intensity burning under optimum conditions would be used to reduce up to 75% of the existing vegetation.

10. Granite View Community Fuel Break (FS/Private) - Granite View Dr (at Tuttle Creek), through private property to DWP property south of Granite View homes. (~1.0 miles/3.6 acres on FS and ~0.5/1.8 acres miles on private)

100 ft. wide fuel break with routine maintenance from Granite View Dr. (at Tuttle Creek) to DWP property boundary. (A portion of this is in place as the result of a control line from a past wildfire.) A combination of mowing, chainsaws, and handtools may be utilized to remove upland vegetation. Mulch leftover from mowing operations would be left onsite. Vegetation cut using chainsaws would be piled and burned. No mechanical equipment would be used in areas where fuel break would cross springs, and only upland or dead vegetation would be removed in these areas. Regrowth of non-native vegetation will be monitored and controlled by the best available means. Replanting of native fire resistant vegetation may also be utilized.

13. West Carroll Creek Shaded Fuel Break (FS) - In Carroll creek drainage along Private/FS property boundaries (~0.75 acres)

Decedent shrubs and riparian vegetation would be selectively removed using chainsaws within 100 ft. west of private property boundaries. Cut material would be either be chipped, or piled and burned onsite. Any burn piles would be created outside of riparian vegetation. Regrowth of non-native vegetation will be monitored and controlled by the best available means. Replanting of native fire resistant vegetation may also be utilized.

Appendix A: Alabama Hills Defensible Space Project Design Criteria

Air Quality

- Prior to prescribed fire operations, appropriate permits will be obtained from Great Basin Unified Air Pollution Control Board (GBUAPCB).
- “Burn” or “No Burn” day conditions will be adhered to, as determined by the California Air Resources Board (CARB).
- Degradation of air quality in Class I Airsheds will be prevented by conducting prescribed fire operations when meteorological conditions favor smoke dispersal away from these areas.
- Prescribed fire operations will be conducted when meteorological conditions favor minimal nuisance smoke in nearby communities, recreation sites, and other developed areas.

Cultural Resources

- Identified cultural resource sites will be protected through the implementation of Approved Standard Protection Measures in accordance with the Programmatic Agreement among the USDA Forest Service, Pacific Southwest Region (Region 5), California State Historic Preservation Officer, Nevada State Historic Preservation Officer and the Advisory Council on Historic Preservation Regarding the Processes for Compliance with Section 106 of the National Historic Preservation Act for Management of Historic Properties by the National Forests of the Pacific Southwest Region (2013).
- Tribal concerns regarding treatment activities will be addressed throughout the course of project implementation as they become known.

Recreation

Activities in recreational areas will be timed to have the least possible impact on visitors.

Soils and Hydrology

- All work is being done to provide defensible space around structures or high use recreation sites and will be done with hand crews or low ground pressure equipment so the project qualifies for Category 1 and 2 of the Lahontan Water Quality Control Board 2014 Timber Waiver.
- All Riparian Conservation Objectives (RCOs) for Riparian Conservation Areas (RCAs are 300 feet from each perennial stream bank and 100 feet from each intermittent or ephemeral stream (SNFPA 2004)) and all applicable Best Management Practices (BMPs) for timber management, vegetative manipulation practices, and fuels management will be implemented. Any adjustments would only occur after site-specific analysis. The

Waterbody Buffer Zone around class 1 streams is 75-150 feet depending on slope (If slope is <30%, the zone is 75 feet, if 30-50%, the buffer zone is 100 feet, if >50%, the buffer zone is 150 feet). RCOs, BMPs and Lahontan Water Quality Control Board Timber waiver criteria have been selected and combined to create a set of watershed mitigation measures for this project including the following:

- The project will not involve construction of new or widening of existing roads or watercourse crossings.
- Mechanical equipment (i.e. mower) will not be used during wet soil conditions that would adversely affect soil porosity, hydrologic function, or runoff potential. Mechanical equipment use shall be limited to slope less than 30% and when the soil is not saturated and is operable.
- The activities must not cause or create erosion, destabilization of stream banks, temperature increases in waterbodies, non-target disturbance to vegetation within WBZ, or concentrated surface runoff.
- Low ground pressure equipment will be used within Waterbody Buffer Zones (WBZs) but will not be driven across watercourse crossing (including dry ephemeral channels).
- Chipped or slash material will not be discharged into waterbodies or deposited in locations where such material may discharge to a waterbody.
- Areas disturbed by this project will be stabilized when the operation is completed or prior to winter period.
- Fuel will not be used or stored within RCAs, except at administrative sites when it has proper containment. Equipment and vehicles should have a spill containment kit and should be inspected for fluid leaks regularly.
- No landings will be constructed. All landings will be located by Forest Staff in previously disturbed areas (roads and parking lots).
- No pesticides will be used as part of this project. No Sporax™ will be used due to the lack of documented incidence of annosum root rot in or near the project area.

Special Areas (Inventoried Roadless Area)

- In the locations where there is a small overlap of treatment areas with IRA, the Visual quality, Recreation, Wildlife, Soils and Hydrology, Air Quality and Noxious Weed standards will protect the characteristics of the IRA, including the Hydrology design feature that prohibits any new road or landing construction or widening of existing roads.

Visuals

- Treatments will be designed to reduce visual contrast as much as possible. Shaded fuelbreaks will have a graduated thinning density to blend the outer edge into the unthinned stand. All fuelbreaks that have high visual sensitivity will have a wavy or “feathered” outer edge and follow natural features as much as possible. The outer half of shrub treatments islands of vegetation (including clumps of pinyon-juniper where it occurs) will be left to create a mosaic and reduce the visual impacts.
- Slash piling will not occur in high use areas.

Weeds

- To prevent introduction of non-native invasive plants, equipment that has operated in areas known to be infested with weeds will be cleaned prior to entering the project area. Operators will certify that equipment is weed free prior to starting operations in each unit.
- In units where localized weed populations are known or large differences exist in the abundance of weeds, treatment will be done first in the uninfested or low density areas and move to the most infested areas to prevent spread of propagules from high to low density or to completely uninfested areas.
- Post-treatment monitoring of the project area would occur to detect any new or spreading of existing noxious weed populations. If noxious weed treatment becomes necessary, the method, intensity and timing of such treatment will be analyzed, disclosed and documented in a separate environmental analysis.

Monitoring Plan

- A Vegetation Management specialist or qualified representative will visit the sites during and after implementation to verify that project specifications are met and to qualitatively assess if desired conditions were achieved.
- Treatment units will be entered into the pool for selection of a subset of project sites for fuel treatment effectiveness monitoring as a part of the Interagency Inyo National Forest and Bishop BLM Fuels Programmatic Monitoring Program.
- Post treatment noxious weed monitoring will be conducted (see Noxious Weed Design Criteria above).